

STACKABLE BLOW MOLDED CABINET**CROSS-REFERENCE TO RELATED APPLICATIONS**

[0001] This application claims the benefit of U.S. Provisional Application No. 60/464,699, filed on April 23, 2003.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

[0002] Not applicable.

BACKGROUND OF THE INVENTION

[0003] The present invention relates to a stackable vertical file cabinet. In particular, the present invention relates to a stackable vertical file cabinet having fully extendable drawers. More particularly, the invention relates to a fire resistant stackable vertical file cabinet having fully extendable drawers and a locking mechanism that is capable of remaining in a locked position even if the file cabinet is damaged by fire.

[0004] Vertical file cabinets typically include a plurality of individual cabinet housings which open at the front so as to receive a plurality of file drawers therein in a vertically stacked arrangement. Such cabinets are well known and typically use fasteners such as screws or other connection methods to assemble the individual cabinet housings to one another to form a vertical cabinet assembly.

[0005] However, existing vertical file cabinets have a number of drawbacks and deficiencies. For instance, the use of screws or similar fasteners to secure each file cabinet to one another to form a vertical file cabinet can be difficult and time consuming. In addition, the use of screws or similar fasteners makes it difficult and

inconvenient to rearrange or customize the configuration of the cabinets to suit the needs of a user.

[0006] Existing vertical file cabinets also include drawers that are slidably positioned within the drawer housing by guide tracks that run on rollers or ball bearings. Also, the drawer assembly itself is made up of a number of parts that are assembled through the use of various tools and fasteners. The use of rollers and ball bearings and the need to use tools and fasteners to assemble the drawer assembly increases manufacturing time and cost.

[0007] Additionally, locking mechanisms used on file cabinets have a tendency to lose their ability to secure the file cabinet when exposed to fire. In particular, exposing the lock to increased temperatures causes the lock components to either melt or lose their structural integrity so that the cabinet drawer may be opened without regard to the locking mechanism.

[0008] Accordingly, there exists a need for a multi-drawer file cabinet system that allows for file cabinets to be securely and easily stacked upon one another without additional fastening members, while allowing for the file cabinets to be easily re-arranged to suit the needs of a user. In addition, there is a need for a drawer assembly that minimizes the use of tools and fasteners to reduce manufacturing time and cost. Further, there is a need for a file cabinet locking mechanism that remains functional even after being exposed to elevated temperatures. The present invention fills these needs as well as other needs.

BRIEF SUMMARY OF THE INVENTION

[0009] In order to overcome the above stated problems and limitations there is provided a multi-drawer fire-resistant file cabinet having an upper cabinet that may be stacked on top of a lower file cabinet.

[0010] In general, the lower cabinet may include a top surface having a peripheral edge with a first perimeter. The upper cabinet includes a base with a sidewall. The sidewall has a peripheral edge with a second perimeter. The second perimeter is larger than the first perimeter so that the sidewall fits around the peripheral edge of the top surface of the first cabinet.

[0011] In addition, the sidewall of the base includes a top edge, wherein the distance between the top edge and the peripheral edge of the sidewall is equal to the distance between the peripheral edge of the top surface of the first cabinet and the edge of the drawer opening. A bumper or washer may be positioned between the base and the top surface of the lower cabinet to prevent damage to the cabinets. An accessory holder may also be positioned on top of the upper cabinet.

[0012] Further, the upper and lower cabinets may include an interior casing, an upper shell portion and a rear shell portion. At least one of the upper shell portion and the rear shell portion has a tab extending from a bottom edge thereof, and the base has at least one slot defined therein for accepting the tab to secure the upper shell portion and rear shell portion to the base.

Each of the cabinets may also include an extendable drawer assembly having a pair of slide members slidably positioned between a pair of outer tracks formed in an interior casing and a pair of tracks formed in a drawer frame. The outer tracks formed in the interior casing may each include an outer groove and an inner groove, wherein at least one of the slide members have a stop extending therefrom that extends into the inner groove formed in the interior casing. A pair of drawer tracks may extend from the drawer frame and have slots defined therein, wherein each of the slide members have slide tabs that extend into the slots formed in the drawer

tracks. Moreover, the drawer assembly may further include a clip having a locking tab that is positioned within a lock slot formed in the slide tabs.

[0013] Furthermore, the drawer assembly may include a drawer head, an escutcheon plate, a drawer front, and a locking mechanism, wherein the drawer head and the escutcheon plate are coupled with the drawer front, and the locking mechanism is positioned within the escutcheon plate. The locking mechanism may include a cam having an attaching leg, a flat portion, and a locking leg. The drawer head includes a ledge positioned below at least a portion of the flat portion of the cam, and the interior casing has a recess formed therein for receiving the locking leg of the cam to allow the drawer assembly to remain in a locked position even if the cabinet sustains fire damage.

[0014] Additional objects, advantages and novel features of the present invention will be set forth in part in the description which follows, and will in part become apparent to those in the practice of the invention, when considered with the attached figures.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

[0015] The accompanying drawings form a part of this specification and are to be read in conjunction therewith, wherein like reference numerals are employed to indicate like parts in the various views, and wherein:

[0016] FIG. 1 is a perspective view of a multi-drawer file cabinet having upper and lower file cabinets in accordance with the present invention;

[0017] FIG. 1A is a perspective view of an accessory holder that may be used in conjunction with the multi-drawer file cabinet shown in FIG. 1;

[0018] FIG. 2 is an exploded view of at least one of the file cabinets shown in FIG. 1 without a drawer assembly;

[0019] FIG. 2A is an enlarged partial bottom perspective view of a base and an upper shell portion of at least one of the file cabinets shown in FIG. 1;

[0020] FIG. 3 is an enlarged partial bottom perspective view of the upper shell portion shown in FIG. 2;

[0021] FIG. 4 is an enlarged partial top perspective view of the base shown in FIG. 2;

[0022] FIG. 5 is an enlarged partial bottom perspective showing the base coupled with the upper shell portion in FIG. 3;

[0023] FIG. 6 is a perspective view of the base and an interior casing of at least one of the file cabinets shown in FIG. 1;

[0024] FIG. 7 is an enlarged partial perspective view of the interior casing engaged with a front portion of the base;

[0025] FIG. 8 is a partial rear perspective view of the upper shell portion, the base, and the interior casing shown in FIG. 2;

[0026] FIG. 9 is a side perspective view of the drawer assembly shown in FIG. 1;

[0027] FIG. 10 is an enlarged partial perspective view of the interior casing;

[0028] FIG. 11 is a perspective view of the interior casing shown in FIG. 2;

[0029] FIG. 12 is an enlarged partial perspective view of a side member of the drawer assembly shown in FIG. 9;

[0030] FIG. 13 is an enlarged partial perspective view of the drawer assembly shown in FIG. 9;

[0031] FIG. 14 is an enlarged partial perspective view of the drawer assembly shown in FIG. 9;

[0032] FIG. 15 is a cross-sectional view taken along line 15-15 in FIG. 9;

[0033] FIG. 16 is a perspective view of a drawer frame that is a component of the drawer assembly shown in FIG. 9;

[0034] FIG. 17 is a rear perspective view of a drawer front that is a component of the drawer assembly shown in FIG. 9;

[0035] FIG. 18 is a front perspective view of a drawer head that is a component of the drawer assembly shown in FIG. 9;

[0036] FIG. 19 is a rear perspective view of the drawer head shown in FIG. 9;

[0037] FIG. 20 is a rear perspective view of an escutcheon plate that is a component of the drawer assembly shown in FIG. 9;

[0038] FIG. 20A is a rear perspective exploded view of the drawer front and escutcheon plate of the drawer assembly;

[0039] FIG. 20B is a rear perspective view similar to FIG. 20A with the escutcheon plate mounted in the drawer front;

[0040] FIG. 20C is a front perspective view showing the escutcheon plate mounted to the drawer front;

[0041] FIG. 21 is a front perspective view of a locking mechanism that is adapted to be mounted to the escutcheon plate shown in FIGS. 20 and 20C;

[0042] FIG. 21A is a rear perspective view of the locking mechanism shown in FIG. 21;

[0043] FIG. 22 is a rear perspective view of the escutcheon plate and locking mechanism secured to the drawer front with a pair of holding clips;

[0044] FIG. 23 is an enlarged partial perspective view of the drawer assembly shown in FIG. 9; and

[0045] FIG. 24 is cross-sectional view taken along line 24-24 in FIG. 1 showing the locking mechanism in a locked position.

DETAILED DESCRIPTION OF THE INVENTION

[0046] Referring now to the drawings in detail, and initially to FIG. 1, reference numeral 10 generally designates a multi-drawer file cabinet. In general, file cabinet 10 may include an upper file cabinet 11 and a lower file cabinet 12. With additional reference to FIG. 2A, both upper file cabinet 11 and lower file cabinet 12 may include a base 13 having a sidewall 13a and a lower surface 13c. The peripheral edge of sidewall 13a may be rectangular, circular or any other shape. Furthermore, upper and lower vertical file cabinet 11, 12 have a top surface 14 having a peripheral edge in the shape of a rectangle, circle or any other shape that allows it to fit within the boundary of the peripheral edge of sidewall 13a. It will be understood that sidewall 13a and top surface 14 are preferably the same general shape.

[0047] The inner perimeter or peripheral edge of sidewall 13a of base 13 is slightly larger than the outer perimeter or peripheral edge of top surface 14 to allow for a secure fit between upper and lower file cabinet 11, 12. In particular, sidewall 13a includes a top edge 15 and a bottom edge 16, wherein the distance between top edge 15 and bottom edge 16 may be equal to or less than the distance between a top surface 17 of lower file cabinet 12 and a top edge 18a of a drawer opening 18. The spacing between top surface 17 and upper edge 18 of a drawer opening allows for maximum overlap between base 13 and top surface 14 without prohibiting the opening of a drawer assembly 19. Additionally, as best seen in FIGS. 2 and 2A, one or more bumpers or washers 13b may be attached to lower surface 13c of base 13 to assure that one or more screws 30 do not contact top surface 17 of lower file cabinet 12.

[0048] As best seen in FIGS. 1 and 2A, multi-drawer file cabinet 10 may be assembled by placing upper file cabinet 11 on top of lower file cabinet 12 so that the

inner perimeter of sidewall 13a fits securely over top surface 14 of lower file 12. After assembly, the drawer assembly 19 will open without contacting bottom edge 16 of base 13. While FIG. 1 illustrates a file cabinet 10 with two individual cabinets, it will be understood that file assemblies with more than two individual cabinet assemblies are also within the scope of the present invention.

[0049] As best seen in FIG. 1A, an accessory holder 140 may be placed on top of upper file cabinet 11. Accessory holder 140 may include a base 13d that has the same interior dimensions as base 13 of vertical file cabinets 11, 12. Thus, accessory holder 140 may be placed on top portion 14 of upper file cabinet 11 without interfering with the opening of drawer assembly 19. In addition, accessory holder 140 may also include one or more file holders 141, paper clip holders 142, pencil holders 143, and memo pad holders 144. While accessory holder 140 is shown with a particular configuration of accessory slots or compartments, it will be understood that other configurations are also contemplated.

[0050] As best seen in FIG. 2, each file cabinet 11, 12 may include a three piece sheet metal assembly. Specifically, the sheet metal assembly is made up of an upper shell portion 21, a rear shell portion 22 and base 13. Further, an interior casing or housing 23 is adapted to be positioned within shells 21, 22 and base 13. Upper portion 21 consists of a top section 17a and two side sections 24, 25. With additional reference to FIG. 3, side sections 24, 25 each have one or more tabs 26 that extend from at least one of bottom edge 20a, 20b and extend inwardly generally toward the opposite edge. Also, each of tabs 26 may have a mounting hole 27 defined therein.

[0051] With additional reference to FIG. 4, base 13 includes a number of slots 28 that corresponds to the number of tabs 26, and has mounting holes 29 that are defined therein positioned adjacent to tabs 26. Slots 28 are positioned and aligned for

receiving tabs 26 that extend from side sections 24, 25. Additionally, each of the slots 28 of base 13 also include a fitted groove 28a. Groove 28a may be sized to allow each of tabs 26 to slide therein after being positioned through their respective slots 28.

[0052] In order to securely attach side sections 24, 25 to base 13, each of the tabs 26 are placed into their respective slots 28 on base 13. As best seen in FIG. 5, tabs 26 are then slid into grooves 28a until the central mounting hole 27 of tab 26 is aligned with mounting hole 29. To further secure upper shell portion 21 to base 13, screw 30 or other suitable fastener may be fastened within holes 27 and 29.

[0053] As best seen in FIGS. 6-8, interior casing 23 includes a front side 31, a rear side 32 and may be blow molded or formed by other processes or methods.

Additionally, base 13 further includes a front end 33, a back end 34, a top surface 35, and a lip 36. While the illustrations of FIGS. 6 and 7 show interior casing 23 on base 13 without upper shell portion 21 attached to the base 13, interior casing 23 may also be added to base 13 prior to, or after, the aforementioned step of attaching upper shell portion 21 to base 13.

[0054] To further secure interior casing 23 to base 13, interior casing 23 is placed on top surface 35 of back end 34 of base 13, and then slid forward toward the front end 33 of base 13. When front side 31 of interior casing 23 converges with front end 33 of top surface 35 of base 13, it engages lip 36 that is attached to and extends from base 13. Specifically, lip 36 extends upwardly from top surface 35 and bends at approximately a right angle towards back end 34 of base 13. Lip 36 shall serve to secure interior casing 23 to base 13.

[0055] As best seen in FIGS. 5 and 8, once interior casing 23 is secured to base 13, and upper shell portion 21 is secured to base 13, it will be understood that casing 23 is filled with insulation material. The insulation material may be a non-

flammable, thermal insulating material, generally made of a mixture that solidifies in a mold. The steps of placing interior casing 23 into the cabinet between upper shell portion 21 and base 13, and then filling it with the insulation material has the added benefit of providing a brace and additional support for the cabinet.

[0056] As best seen in FIGS. 2 and 8, upon the addition of the insulation material into interior casing 23, the rear shell portion 22 is mounted to base 13 and upper shell portion 21. The rear shell portion 22 may have one or more mounting holes 45 defined therein, and a plurality of tabs 38 having a mounting hole 39 defined in each tab 38. Moreover, the rear surface of upper shell portion 21 include one or more mounting holes 44 defined therein, and base 13 has a plurality of slots 40 with adjacent mounting holes 41 defined therein. The mounting holes 44 defined in upper portion 21 of the assembly are located on a recessed surface 42. Recessed surface 42 is indented from outer surface 43 a distance corresponding to the thickness of the rear shell portion 22, wherein outer surface 46 of rear shell portion 22 may be flush with outer surface 43 of the cabinet assembly.

[0057] The assembly of the rear shell portion 22 is completed by inserting tabs 38 into slots 41 and aligning mounting holes 39 with mounting holes 41. Additionally, mounting holes 45 of the rear shell portion 22 are aligned with mounting holes 44 on recessed surface 42. Screws (not shown) or any suitable fasteners may be used to secure the rear shell portion 22 to upper shell portion 21 by using the aforementioned mounting holes.

[0058] As best seen in FIG. 9, drawer assembly 19 includes a front drawer assembly 54a, a drawer frame 54 and two opposing slide members 50a, 50b that allow the drawer assembly to move relative to interior casing 23. With additional reference to FIGS. 10 and 11, each slide member 50a, 50b is disposed between a pair of outer

tracks 51a, 51b and integral drawer tracks 52a and 52b. Outer tracks 51a, 51b may be integrally formed on the interior sidewalls of interior casing 23, and integral drawer tracks 52a and 52b formed in the outside surface of sidewalls 53a and 53b of drawer assembly 19.

[0059] As best seen in FIGS. 10 and 11, each of outer tracks 51a and 51b are formed on the interior of interior casing 23 and further include a first outer groove 55a, 55b and a second inner groove 56a, 56b. With additional reference to FIGS. 9 and 12, slide members 50a, 50b each comprise an upper surface 57a, 57b, a lower surface 58a, 58b, and an outwardly protruding stop 59. When drawer assembly 19 is installed in the interior casing 23, each of the stops 59 extend into inner grooves 56a, 56b thereby providing a first drawer stop, and each slide member 50a, 50b is slidably disposed in outer grooves 55a, 55b on the interior wall of interior casing 23. It will also be understood that slide members 50a, 50b may be one common piece (not shown), in which left and right side slide members 50a, 50b are attached by a rear rail. The rear rail may serve as an additional support to retain left and right outside slide members within the slide rail groove in the interior wall.

[0060] As best seen in FIG. 9, integral drawer tracks 52a, 52b protrude from the outside surface of sidewalls 53a, 53b of drawer assembly 19 and have elongated slots 60a, 60b defined therein. With additional reference to FIGS. 13 and 14, slide members 50a, 50b further comprise inwardly extending slide tabs 61a, 61b, each having a lock slot 62 defined therein, respectively.

[0061] When assembled, as best seen in FIG. 9, the drawer tracks 52a, 52b protruding from the outside surface of sidewalls 53a, 53b of drawer assembly 19 are inserted into the respective inner channels 64a, 64b of slide members 50a, 50b. Slide tabs 61a, 61b are inserted into the respective elongated slots 60a, 60b of sidewalls

53a, 53b of drawer assembly 19 as best seen in FIG. 13. Drawer assembly 19 is then secured to slide members 50a, 50b through the use of clips 63a, 63b. Each clip 63a, 63b, includes a locking tab 164 for insertion into lock slot 62 of slide tabs 61a, 61b. Further, clips 63a, 63b may be formed of a plastic material and include a flange 63b that extends generally perpendicular to an engaging portion 63c. Also, it will be understood that a brace 63d may extend between flange 63b and portion 63c.

[0062] In addition to serving to secure drawer frame 54 to the two slide members 50a, 50b, plastic clips 63a, 63b assure that the metal slide tabs 61a, 61b do not contact the metal from drawer assembly 19 when the drawer is opened. Additionally, to further minimize contact between the metal surfaces of sidewalls 53a, 53b and slide members 50a, 50b, upper extrusions 65, and lower extrusions 66 may be added to upper surfaces 57a, 57b and lower surfaces 58a, 58b of slide members 50a, 50b, respectively.

[0063] As best seen in FIG. 15, upper extrusions 65 or lower extrusions 66 may be formed in an H-shape so that they fit within a slot 70 formed in each of the respective upper surfaces 57a, 57b and lower surfaces 58a, 58b of slide members 50a, 50b. It will also be understood that upper and lower extrusions may be C-shaped so that extrusions 65, 66 slip over the end of the respective surfaces of the slide members 50a, 50b. If the extrusion is C-shaped, the extrusion may be secured to slide member 50a, 50b by a tab (not shown) that is integrally formed with the respective surface of the slide member. The extrusions may be plastic or any other suitable material.

[0064] As best seen in FIG. 16, a drawer frame 54 is shown with sidewalls 53a, 53b, a front section 73, a back section 74, and a bottom section 75. Front section 73, back section 74, and bottom section 75 may be constructed from a single piece of sheet metal, but other configurations are also contemplated. Additionally, the

sidewalls 53a, 53b are coupled with front section 73, back section 74, and bottom section 75 by any suitable method of attaching sheet metal, such as, but not limited to, a "Tog-L-Lock" fastening device.

[0065] As best seen in FIGS. 9 and 17-21, a front drawer assembly 54a includes a drawer front 76, a blow molded drawer head 77, an escutcheon plate 78, and a locking mechanism 79. As will be described below, front drawer assembly 54a may be assembled without tools or fasteners thereby reducing assembly costs. In particular, as best seen in FIG. 17, drawer front 76 may be formed of sheet metal and includes an escutcheon plate opening 80, a faceplate recess 82, a sheet metal ledge 83, a latching slot 84, and attaching tabs 85. With reference to FIGS. 20, 20A, 20B and 20C, escutcheon plate 78 includes a pair of side support members 88 and a rim 87, and is attached to drawer front 76 by first inserting rim 87 through escutcheon plate opening 80. In order to assure that escutcheon plate 78 is securely attached to drawer front 76, rim 87 of escutcheon plate 78 may be inserted into faceplate recess 82 and a pair of holding clips 86 (FIG. 22) may be inserted between side support members 88 and the back surface of drawer front 76. Each of holding clips 86 have a protrusion that is adapted to snap within an aperture 86a to securely keep escutcheon plate 78 coupled with drawer front 76.

[0066] As best seen in FIGS. 21, 21A and 22, a locking assembly 79 may be movably mounted in drawer assembly 19, and particularly in front drawer assembly 54a, for transition between closed and opened positions to selectively prevent access to the interior compartment of internal casing 23. In general, locking assembly 79 includes a body 100 that may be formed of a die cast material, and a cam 90 that may be formed of steel. Cam 90 may be Z-shaped and further comprises a locking leg 91, an attaching leg 92, and a flat portion 93. In addition, attaching leg 92 may have a

slot (not shown) defined therein to allow cam 90 to be attached to a internal bezel (not shown) through the use of a fastening mechanism.

[0067] With reference to FIGS. 20, 20C, 21, 21A and 22, locking assembly 79 may be mounted through the front of escutcheon plate 78 in drawer face 76. In doing so, an upper tab 101 and a lower tab 102 of locking assembly 79 are aligned with an upper slot 103 and a lower slot 104 on escutcheon plate 78 to assure proper positioning. Once locking assembly 79 is properly aligned, a plurality of side tabs 105 of escutcheon plate 78 are snapped into a pair of side recesses 106 defined in locking assembly 79, thereby securing locking assembly 79 with escutcheon plate 78.

[0068] As best seen in FIG. 17, two side grooves 114 and a top groove 115 are formed on the outer perimeter of drawer front 76. With additional reference to FIGS. 18 and 19, drawer head 77 also includes an escutcheon plate receiving recess 110, a lock assembly receiving recess 111, a ledge 112 and a lip 113. Drawer head 77 is attached to drawer front 76 by sliding lip 113 into the two side grooves 114 formed on the outer perimeter of drawer front 76 through entry points 116. Drawer head 77 is in position when upper surface 117 of lip 113 contacts upper surface 118 in top groove 115. Drawer head 77 is then secured to drawer front 76 at the top 115 and two sides 114.

[0069] As best seen in FIGS. 9 and 16, the fully assembled front drawer assembly 54a may now be attached to the completed drawer frame 54. Specifically, with additional reference to FIG. 19, a rear protrusion 128 extends outwardly from the rear of drawer head 77 and includes a lower surface 119. Further, front section 73 of drawer frame 54 includes a top edge 120 and tab mounting surfaces 121. As best seen in FIGS. 16, 17 and 23, the front drawer assembly 54a is secured to drawer frame 54 by fixedly attaching tabs 85 to tab mounting surfaces 121 on the drawer frame 54 by

any suitable method of attachment, such as, but not limited to, welding, adhesive or mechanical fasteners. With further reference to FIG. 19, top edge 120 of front section 73 of drawer frame 54 is coupled with lower surface 119 of protrusion 128 to securely hold drawer head 77 in place.

[0070] As best seen in FIGS. 22 and 24, the locking mechanism 79 is in the secure or locked position. Latching slot 84 of ledge 83 may be shaped to provide adequate clearance to allow cam 90 to rotate into the locked position. In operation, the drawer assembly 19 is locked when cam 90 is in the upright position as illustrated in FIG. 24. Attempting to open drawer assembly 19 while locking mechanism 79 is in a locked position will result in cam 90 contacting ledge 83, which will preclude the drawer from opening.

[0071] In the event that the file cabinet is subjected to fire or extreme heat, sheet metal elements, such as ledge 83, may become damaged and be unable to serve as a stop for the cam. In such an event, drawer assembly 19 of file cabinet 10 will remain secure. In particular, upon attempting to open the drawer assembly 19, ledge 112 (FIGS. 18 and 24) in drawer head 77 will serve as a rest for flat portion 93 of cam 90, and a front surface 131 adjacent to a recess 132 formed in a top wall 130 of interior casing 23 will contact locking leg 91 of cam 90.

[0072] The present invention overcomes and ameliorates the drawbacks and deficiencies in the prior art. Specifically, the multi-drawer file cabinet of the present invention provides fire-resistance and allows a plurality of file cabinets to be securely stacked upon one another without requiring additional fastening members. In addition, the present invention includes at least one rubber bumper or washer positioned between upper and lower file cabinets to prohibit the fastening members

from damaging the top surface of the lower file cabinet. Furthermore, the present invention allows two stacked panels to fit under a standard size top.

[0073] The present invention also includes a unique full extension, inexpensive drawer assembly. At least one anti-scrape polymeric guide extrusion is located at the outer ends of the channels in order to reduce binding and scraping of the slide channels with other portions of the drawer assembly and the interior casing. The drawer assembly allows for easy installation and does not utilize rollers or bearings. To reduce assembly costs, the entire front drawer assembly can be assembled without tools or fasteners. Furthermore, the present invention includes a unique lock assembly that retains the drawer assembly in a locked position even if the drawer front or drawer assembly sustains fire damage.

[0074] Although the present invention has been described in considerable detail with reference to certain preferred versions thereof, other versions are possible. Therefore, the spirit and scope of the appended claims should not be limited to the description of the preferred versions contained herein.

[0075] All features disclosed in the specification, including the claims, abstract, and drawings, and all the steps in any method or process disclosed, may be combined in any combination, except combinations where at least some of such features and/or steps are mutually exclusive. Each feature disclosed in the specification, including the claims, abstract, and drawings, can be replaced by alternative features serving the same, equivalent or similar purpose, unless expressly stated otherwise. Thus, unless expressly stated otherwise, each feature disclosed is one example only of a generic series of equivalent or similar features.